



THOMAS G. NEWMAN,
EDITOR.

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EDITORIAL BUZZINGS.

CHRISTMAS.

"So now is come our joyfulest feast,
Let every one be jolly;
Each room with ivy leaves is dressed,
And every post with holly."

Dr. C. C. Miller was not at the International, and his genial face was sadly missed.

At the Paris Exposition, the awards to Americans were very numerous. Among them we notice a Silver Medal to Chas. Dadant & Son, for "Appliances in Bee-Culture," and a Bronze Medal for "Honey." Honorable mention is made upon honey exhibits to E. R. Newcomb and Mary E. Ross.

The new officers of the "International" are men of extensive experience in honey-production and practical management of the apiary. We may reasonably expect that the next Convention will eclipse all former gatherings of American apiarists.

We understand that the members of the "International" were photographed, and that an engraving of it is to appear in *Gleanings* soon. The "Life Members" being absent, will lose their places in the engraving.

Presents are now in order. Can you think of anything more welcome to your friend, than a year's subscription to the *ILLUSTRATED HOME JOURNAL*? It would be hard to find any better present for the money—or one that would bring more pleasure throughout a whole year.

To Our Friends.—This is the subscription season, when people generally select their periodicals for the coming year. May we ask you, dear reader, to exert your influence among your friends, in order to induce them to take one or both of our JOURNALS? They aim to benefit all who read them—they are practical, and their tone pure. In price they are so low that none can say they are too poor to subscribe for them. We desire to place the *ILLUSTRATED HOME JOURNAL* in the home of every person in America, and the *BEE JOURNAL* in the hands of every one interested in bee-keeping. We ask our friends to help us in this endeavor, and in return we will help you. If sent this month, \$1.50 will pay for both JOURNALS for 1890. Now is the time to get your full money's worth.

Dr. A. B. Mason, ex-President of the "International," has been selected to have charge of the Bee and Honey Exhibit for the United States at the World's Fair of 1892, and Mr. R. McKnight is to superintend the Canadian apiarian exhibit. These appointments are excellent ones—in fact we do not believe better selections could have been made. Both men are experienced in that line of business, and we may look for something creditable for North American bee-keepers.

The *Canadian Bee Journal* has our thanks for kind mention and regrets at our enforced absence. Just at that time Mrs. N. was much worse, but now she has rallied again. It is a very treacherous and fitful disease. We should have enjoyed the rare treat of meeting our Canadian brethren, and much regret that we could not have done so.

Our Premium-List Supplement describes many articles of great merit, and that are useful in every family. We have carefully selected them to offer as premiums for getting up clubs for our JOURNALS. We do this to induce our friends to devote a few hours of labor for us. Our JOURNALS are first-class in their lines, and are needed everywhere. We do not want any one's labor without remuneration, and the articles offered will pay for the labor of getting up clubs, and thus the arrangement will prove to be for our mutual advantage.

The *BEE JOURNAL* gives 52 dividends in a year on an investment of one dollar. Can any one desire a better investment, or richer returns?

Postal Notes are no safer to use in letters than bank bills. Any one can get the money on them. A Money Order can be obtained at the post-office or at the express office for 5 cents (only 2 cents more than a Postal Note), and is perfectly safe; if lost it can be re-issued.

The Report of the International Convention occupies nearly all our space this week. It is the *newest news* extant, and as such will be read with great interest. The essays are excellent, and the discussions "are timely and good." We shall shortly publish the Report in pamphlet form, with the new songs and music, and also portraits of the new and retiring officers. It will make quite a complete and useful book for reference. Price 25 cents. Or with a brief History and Report of all the 19 previous sessions, 50 cents, postpaid.

Christmas Presents.

A novel and pretty way of distributing Christmas gifts is to set your dining-table as you would for a meal. Put on your choicest cloth, and at each one's accustomed place set a soup-dish. The center of the table may have some pretty decorations arranged to suit the fancy; a pot of tall ferns would be lovely. Festoons of evergreens and holly may hang from the chandelier or lamps, as the case may be. All the small gifts can be put into the dishes, while others may be neatly arranged in front. Such gifts as sleds, rocking-horses, etc., should be placed where the chair usually stands. Let some one have special charge of the arrangements. When all is ready, the bell may be rung, as at dinner time, and the household called together. In this way the older folks may share the surprises and pleasures.

Let me whisper a word or two more to my young readers, before I lay down my pen. Perhaps you are happy; perhaps you have all that you can wish to make your cup of joy run over; but stop and think a moment. Do you not know some one who may be less fortunate; whose Christmas will be empty and dreary, unless some one else (which may be you) brightens it? Remember, even in your gladness, that "it is more blessed to give than to receive." The giving of one little token to some poor child will bring you much additional joy. —*American Agriculturist* for December.

The Union.—Here is what Brother Heddon says when sending his Vote and Dues for 1890:

I know the value of promptness. The Union has done so well that I vote for all the old officers except James. When you want more money than these dues amount to, I trust every man of us is willing to be drawn on for another assessment. Is it not strange that we have so small a membership? What can our brother bee-keepers be thinking of? Is it any wonder that so many fail? We have a rule declaring that the Union will defend no member against a storm whose clouds were gathering before he joined. This is as it should be, I feel sure. I consider this the main point to induce apiarists to become members.

JAMES HEDDON.

The Works of Scott and Dickens are not like the "novels" of to-day—both are founded on facts—and are well written in excellent English.

CORRESPONDENCE.

QUEENS.

Several Criticisms Answered on Rearing Queens.

Written for the American Bee Journal
BY G. M. DOOLITTLE.

I notice by the bee-papers, that Dr. G. L. Tinker and others claim that the plan I gave in my book, of having queens fertilized above a queen-excluding honey-board, is not practical. In regard to this, all I have to say is, that it proves a success with me when used as I have given in the Appendix to the book, and I consider it entirely practical in this locality.

In order that the reader may judge whether I know what "practical" work is or not, along this line, I will give the working of the plan with one colony, which is only a sample of numbers worked in the same way:

When the colony was strong enough to occupy a second story, the brood in the lower story was contracted by taking out two frames in the egg and larval form, and the other combs of honey and pollen, and putting in two division-boards, or dummies, one on either side, in place of the so taken out combs, thus leaving 7 frames of brood below. The upper story was then put on, after putting on the queen-excluder, and contracted to six combs, two of which were those containing the eggs and larvæ taken from below, and the others were the combs partly or entirely filled with honey, together with one empty comb taken from the shop. This gave the colony 13 combs instead of the 12 occupied before.

The next day they were given a frame of prepared queen-cells between these two frames of brood, and as the honey was coming in quite freely, more combs were given at each side as was needed, so that when it was time for the queen-cells to hatch, the upper story contained all the combs that it would hold, all of which had more or less honey in them, and were well covered with bees.

At this time, one comb of honey was taken out, so as to make room for the two queen-excluding division-boards, which were slipped down in the grooves made for them. The two combs containing the now sealed brood were placed over behind the excluders, one on either side, with one of the nearly-mature queen-cells on each, while a frame of honey still remained in this apartment. At this time the other mature queen-cells were used, two more frames of eggs and larvæ put in the place of two frames of honey

taken away, and another lot of prepared cells placed between them, as at first, and thus the colony was kept rearing queens all the season in this central apartment.

The next day there was a queen in each end of the hive where the cells had been placed, while in three or four days more the holes in the side of the hive through which these virgin queens were to pass out to meet the drones, were opened, and left so till the tenth day, when an examination showed two laying queens. These were then taken out and sent off, and two more nearly-mature cells put in their places. Meantime the queen below was keeping every available cell occupied with brood, and as I took the two frames of eggs and larvæ from the other hives to use above after the first, the colony was rapidly getting stronger.

About the time the third lot of queens hatched, the colony swarmed, sending out a very large swarm, which was hived in a separate hive.

The operations with the old hive was continued right along just the same as before, except that for about two weeks I did not place any prepared frames of queen-cells above, on account of there being too few bees in the hive to rear the best of queens. In due time the young queen which hatched from cells left below after swarming, became fertilized, and filled the lower hive with brood, just the same as she would have done had there not been any virgin or laying queens above, as the case might be. If my memory serves me rightly, I sold 14 queens from the upper story of this hive, took much extracted honey, or honey in the frames, and in the fall had 2 good colonies for winter.

I relate this, not only to show that the thing is practical, but also to contradict the statement which has gone out, that young queens can only be so fertilized where there is an old or failing queen below. The queen that went out with the swarm was one of my best queens, reared the season before, while no one will say that the last one was an old or failing queen. I said in the start, that this one was only a sample of others, but I will modify it by saying that none of the others worked for queens in the above way swarmed, otherwise the others were the same, and none of them had their queens superseded, thus showing that none were "failing."

Mr. Pratt, and others, seem to think that they must make colonies queenless or use queenless bees to start queen-cells for good queens to be reared. After the cells have been in these queenless colonies two or three days, the partly-finished queen-cells are then given to the bees in the upper stories to finish.

After carefully testing this matter for several years, I consider this a waste of time, and, worse still, for queenless bees will not rear as good queens as will those that rear queens while the old queen is still present in the hive.

The claim is made that the larvæ are neglected when placed above, which may be so when no precaution is used by way of contracting the brood-chamber below, or having too much room for the size of the colony, but when fixed as I have given above, there are as many young bees above, around the queen-cells, as in any part of the hive. I say "young bees,"—by this I mean such bees as feed the larvæ, build comb, etc., and not the white, fuzzy ones which are just hatched, and perform no part of these operations, no matter where they are. When honey is not coming in, the colony rearing queens is always fed, for bees do not rear really good queens, under any circumstances, where no sweets are to be carried from fields or feeder.

Lastly, I have read Mr. Alley's article, on page 744, and care to notice only two items in it, being perfectly willing to leave the matter to the readers for decision, and for them to adopt whatever plan they desire for rearing queens.

The items alluded to, are, first, where he refers to the making of the cell-cups as being "fussy," and says that the labor of using his method "can be performed in less than one-half the time required to make the artificial cell-cups." While no one that has used the two methods will believe any such statement (but for the sake of argument, let that be admitted), yet no one of reasonable mind would throw away the cell-cups on that account, for by their use the cells can be handled, after they are built, with perfect safety by the most inexperienced; and can be taken from where they are built, and placed in nuclei, in less than one-half the time than those built out from comb. Thus we gain all the time lost, and handle the cells with a safety which secures success every time, even in the hands of those who have only a few bees, and little or no experience; the latter being the class for whom my book was intended, as well as for the professional queen-breeder.

The second item is where Mr. Alley seeks to convey the impression that I rear, or recommend rearing, queens in an upper story where there is "no brood," but where there are "dry combs and old bees."

On page 62 of my book, these words are found: "I raised two frames of brood (mostly in the larval form) above, so as to get as large a force of nurse-bees about the prepared cells as possible, to properly feed the queen-

larvæ. The prepared frame was placed between the two with brood in them."

Again, on page 64 are these words: "The cells are better supplied with queen-food, where unsealed brood is placed in the upper story every 10 days—enough better, in my opinion, to pay for the extra work."

Elsewhere in the book I explain how feeding is always resorted to when honey is not coming in plentifully from the fields, so that there is never any "dry combs" in the upper story; and by trying to carry this idea of "no brood, dry combs, and old bees," Mr. A. shows that he has never read my book on queen-rearing, so that he knows nothing of what he is talking, or else he wilfully misrepresents for the sake of carrying out his argument. No matter which "horn of the dilemma" he may take, the reader can clearly see what his intention was by so writing.

No one has ever recommended the rearing of queens with only old bees and dry combs, of late years, that I know of, and surely the foregoing, which is substantially the plan as given in my book (only in outline), does not convey any such impression. As I have said before, the book was not written to harm any one, but, on the contrary, to add my mite to the fund of knowledge already in the world. For this reason I feel willing to accord to every one the privilege, which I consider my own, viz: After hearing a matter, to decide upon that which I think best adapted to my wants.

I have faithfully given in the book all that I considered of value, which resulted from six years of hard labor and experimenting along the line of queen-rearing, and if it benefits no one, I still have the consolation left me, of having tried, to the best of my ability, to be of use in the world, and of having cleared \$500 each of those years, to put into my own pocket.

P. S.—Since writing the above I have received a letter from Mr. Alley, saying:

"I must acknowledge, however, that had you given the plan of placing brood in the upper hive with the cell-cups, you would have had a point a long distance ahead of the world."

This shows that Mr. Alley had not read my book when he wrote his article for the AMERICAN BEE JOURNAL, and I gladly take back what I said about his "wilfully misrepresenting." Ignorance is preferable to being wrong intentionally, at all times; although criticising that with which one is not familiar, so as to give a wrong impression, is hardly excusable. In the above quoted paragraph, Mr. Alley pays high tribute to the plan of rearing queens as given in my book, and places the method "a long distance ahead of the world."

G. M. D.

BEE-TALK.

International Convention at Brantford, Ont.

Written for the American Bee Journal
BY W. Z. HUTCHINSON.

The International American Bee-Association, held its 20th annual convention on December 4, 5 and 6, 1889, at Wickliffe Hall, in Brantford, Ontario, Canada.

The Convention was called to order at 1:30 p.m., with President A. B. Mason in the chair. The following members then paid their dues:

J. Alpaugh, St. Thomas, Ont.
D. Anguish, Brantford, Ont.
Jos. Armstrong, Chapside, Ont.
George H. Ashby, Albion, N. Y.
J. S. Barb, Oakfield, O.
R. Aull, Warwick, Ont.
G. W. Barber, Hartford, Ont.
T. Barkett, Brantford, Ont.
H. J. Beam, Chapside, Ont.
J. E. Bellamy, Blackbank, Ont.
Chas. Brown, Drumgrain, Ont.
Ira Burrows, Drayton, Ont.
J. C. Calvert, Medina, Ohio.
Rev. W. F. Clarke, Guelph, Ont.
Thos. Conway, Eramosa, Ont.
Prof. A. J. Cook, Agricultural College, Mich.
W. A. Cryslor, Chatham, Ont.
C. P. Dadant, Hamilton, Ill.
J. Y. Detwiler, New Smyrna, Fla.
S. A. Dickie, Brantford, Ont.
Martin Emigh, Holbrook, Ont.
A. R. Fierbeller, Mt. Elgin, Ont.
C. Flanders, Boston, Ont.
J. A. Foster, Tilbury Centre, Ont.
F. A. Gemmell, Stratford, Ont.
Wm. Goodyear, Woodstock, Ont.
Wm. Granger, Wanstead, Ont.
J. B. Hall, Woodstock, Ont.
A. E. Hoshal, Beamsville, Ont.
Dr. A. E. Harvey, Wyoming, Ont.
O. L. Hershiser, Buffalo, N. Y.
William Hill, St. Thomas, Ont.
Geo. E. Hilton, Fremont, Mich.
J. Hislop, Strathburn, Ont.
M. B. Holmes, Delta, Ont.
R. F. Holtermann, Romney, Ont.
J. R. Howell, Brantford, Ont.
W. Z. Hutchinson, Flint, Mich.
Andrew Johnston, Stratford, Ont.
E. D. Keeney, Arcade, N. Y.
Wm. Knowles, Carholme, Ont.
Arthur Laing, Acton, Ont.
Robert Langtry, Benton, Ont.
Dr. A. B. Mason, Auburndale, Ohio.
Fergus McMaster, St. Marys, Ont.
R. McKnight, Owen Sound, Ont.
C. McNally, Simcoe, Ont.
F. H. Macpherson, Beeton, Ont.
R. L. Mead, Nassagaweya, Ont.
Thos. Moore, Carholme, Ont.
G. H. Morris, Hatchley, Ont.
Elias Mott, Norwich, Ont.
L. L. Mullock, Binbrook, Ont.
John Newton, Woodstock, Ont.
R. L. Patterson, Lynden, Ont.
A. Pickett, Nassagaweya, Ont.
E. R. Root, Medina, Ohio.
F. A. Rose, Balmoral, Ont.
E. Rosebrugh, Branchton, Ont.
T. Ruddle, Oustie, Ont.
Eugene Secor, Forest City, Iowa.
R. E. Smith, Tilbury Centre, Ont.
Wm. Spedding, Clifford, Mich.
J. Sturgeon, Kincardine, Ont.
E. W. Tanton, Stratford, Ont.
R. L. Taylor, Lapeer, Mich.
Mark Tovell, Guelph, Ont.
Thos. Waken, Glenoak, Ont.
John Yoder, Springfield, Ont.
Mrs. J. C. Calvert, Medina, Ohio.
Mrs. C. P. Dadant, Hamilton, Ill.
Mrs. Dr. A. B. Mason, Auburndale, Ohio.
Mrs. F. H. Macpherson, Beeton, Ont.
Mrs. E. R. Root, Medina, Ohio.
Mrs. J. Sturgeon, Kincardine, Ont.
Mrs. John Yoder, Springfield, Ont.

LIFE MEMBERS—Not present.

D. A. Jones, Beeton, Ontario.
Thomas G. Newman, Chicago, Illinois.

This was one of the most successful meetings that this International society has held for several years, both in point of numbers, and in the character of its discussions.

The first essay read was from Thomas G. Newman, Chicago, Ills., upon

Disposing of the Honey Crop.

Mr. President, Ladies and Gentlemen:

A Yankee, down East, who has given the subject allotted to me briefly to discuss, a thorough study, got up a placard for his salable honey, which read like this: "Hot Rolls and Honey will Draw Human Flies." This he placed up over an attractive display of honey, where it was kept for sale. It was put up in the nicest shape, each package was done up in white tissue paper, and put in "cartons," having nice labels printed in two colors, and little string handles, all ready to be purchased and taken home safely as well as conveniently.

It is no wonder that he never had a surplus crop of honey left on his hands! The cry always was for **more**—no matter how much was produced.

We have in North America nearly a hundred millions to feed. If we divide the honey crop evenly among those, in the United States and Canada, who are hungering for a pure sweet, it will give them but a small taste indeed. If it was placed within reach of all, the whole crop would not last over 20 days. All that is needed is even distribution, an attractive article, and a diffusion of knowledge concerning its consumption and value as a food and for medicinal purposes, and recipes for its use.

To place 100 "Honey Almanacs" with the honey-producers' name and address on them in any town, would sell all that can be produced near it, if the article be put up in attractive packages.

Quite lately we witnessed a little scene which ought to teach a good lesson. A lady went into a store and asked to see some honey in the comb. She was shown some, but turned away quickly in disgust, saying that she did not want that kind!

Do you ask what kind it was? Well, I will tell you. It was of rather a dark color, put up in one-pound sections. The sections were covered with propolis, which had not been scraped off, nor had there been any attempt at it! There had been no separators used in the surplus arrangement, and consequently the combs were very unevenly built, and, as they had been packed in the crates, some combs had rubbed against the protrusions in others, and it was a dripping, sticky, and unsightly affair.

Such work as that would ruin any honey market, and if an apiarist will not learn better, and work in accordance with the advanced ideas in the sunshine of the present, he had better quit the business, and leave it to others more worthy to share in the newer ideas and advancement of this progressive age. **THOMAS G. NEWMAN.**

The subject introduced by Mr. Newman was then discussed in the following manner:

R. L. Meade found his greatest trouble to be from farmers and small bee-keepers, who rushed their crop of honey on the market as soon as they got it off, and who sold it at a very low figure. He had received 2 and 3 cents more per pound for his honey than they did, right in the face of the opposition, and it was because the customers who bought of him were willing to pay that much more for it, because they knew that his product was clean and good, and well cared for. He had sold his entire season's crop at 12½ cents, wholesale, and 15 cents retail. In his section, however, fruit was a complete failure.

F. A. Gemmell kept up his name by furnishing only the very best article of honey.

J. B. Hall sold his honey "on his name." He put his name and address on every section, and he had known such method to bring him orders from points a thousand miles from home. If he had any honey that did not come up to his standard of perfection, he sold it at a less price, and he was particular not to put his name on it.

Prof. Cook here asked how amateurs were to get their names up, as those who had previously spoken were all old hands at the business.

G. Sturgeon kept bees, and had worked up his reputation by keeping his honey clean and in tempting shape. He never fed his bees sugar-syrup, and consequently no one could charge him with adulteration of any kind.

Prof. Cook could not see that feeding sugar-syrup for wintering purposes was going to hurt a man's reputation, if he exercised reasonable care.

Mr. Sturgeon—How will it be prevented?

Prof. Cook—Use other combs, and extract only from the upper and second story.

"Does it make any difference in disposal, as to whether the honey is liquefied or granulated?"

R. F. Holtermann—It makes a great difference. The great bulk of my customers want it in a liquid state, and I sell the great bulk of mine in gem jars.

J. B. Aches' market also demanded liquid honey.

A. Pickett considered it the most natural to have honey in the liquid

state, and found it best suited to his trade.

How Can Propolis be Reduced to a Minimum?

J. B. Hall—Go some place where there is no propolis, or take the crop of honey off by July 20, before which there is very little propolis in my district.

G. Ashby—Make everything a proper bee-space—5-16 of an inch.

Mr. Holtermann—The bee-space will, of course, help materially, but to get off the honey early is the best remedy.

R. L. Taylor took his honey off as soon as possible before there was much propolis.

J. Alpaugh coincided with the views of those who took honey off early.

W. F. Clarke wished to know when there was lots of honey, if the amount of propolis would be in proportion.

Prof. Cook was of the opinion that there would be. He expected to have heard somebody say that the double bee-space helped to reduce the propolis very largely.

Dr. A. B. Mason used double bee-spaces, and found that they were helpful.

R. L. Taylor always uses double bee-spaces.

F. A. Gemmell uses both double and single bee-spaces, and finds more propolis on the sections above single than double bee-spaced honey-boards.

What Size of Sections is Best?

The consensus of opinion was in favor of sections holding one pound, and the size was to be either 4½x4½ and 7 to the foot, or 4½x4½x1½ inches.

EVENING SESSION.

The meeting was called to order at the appointed time by President Mason, who then called upon Mayor C. B. Heyd. The Mayor promptly responded. The following is a short synopsis of the

Mayor's Address of Welcome:

The very pleasing duty devolved upon him of welcoming the Association to the city of Brantford. Brantford had a name for extending hospitality. It was an attractive and pretty city, and he had much pleasure in extending a hearty welcome. He was happy to see so many Canadians present, but he was likewise happy to see such a large number from across the lines. He was glad of the feeling of amity which existed between the two countries. The objects and aims of the people were apparently one and the same. He would not say anything about the little animal that had brought them together. He did not know whether it was an animal or an insect. He was very fond of the product of the bee, but did not

want any closer acquaintance with it. He had, when a boy, become acquainted with it, and the remembrance would undoubtedly remain with him as long as he lived. Since that time he had preferred not to renew the acquaintance.

We have many beautiful buildings and also an hospital, which would be well worth a visit, as well as the House of Refuge, where our aged and infirm are taken care of. Then we have the Blind Institute, where the unfortunate blind were taught and educated to earn their own living. He would, on behalf of Principal Dymond, extend a hearty invitation to members of the Bee-Association, to visit the Institute, also to visit the works of A. Harris, Son & Co., which was one of the largest manufacturing in the country, and a hearty welcome would be given. He would not trespass on their time, but would give way to those who would speak on the bee-question. He would particularly welcome the ladies, who had graced the Convention with their presence. He hoped that the Association would have a most prosperous meeting.

Ald. S. G. Read seconded the Mayor in his address of welcome.

Mr. Clarke, President of the Ontario Association, extended the welcome of all Ontario, of which Brantford was but a small part. If they had been going to choose a model city to show the American delegation, Brantford would be that city.

A quartette, composed of Messrs. Liddell, Pickles, Shapley and Blasdell, with Miss Eva Waters presiding at the piano, rendered two excellent songs.

Prof. Cook was called upon to respond to the addresses of welcome which had been given. He was quite at a loss to know why he had been called upon. But he was sure that a glad welcome always awaited the Americans who attended the conventions in Canada. He had been to Ontario before, and the Americans said they never had anything like the welcome they had received at Toronto, and he was prepared for the reception they had received to-night. They had read some things about fishing. He was glad they had come, as this welcome had assured them of more than a 7-mile limit. There was no section in the world which could compare with Ontario as a honey-producing district. He would not take up any further time, but say they had had a royal greeting, and would go away thinking more of the brothers on this side of the line, and hoped the feelings extended on both sides.

Dr. A. B. Mason then read the following, as the

President's Annual Address.

Ladies and Gentlemen of the International American Bee-Association:

Some one has very truthfully said that this age of civilization is not without its false gods and their worshippers. No evil of the Nineteenth century is more universal. There is one shrine at which almost every one bows with a devotion scarcely excelled by paganism—it is at the shrine of fashion; and we, as bee-keepers, are not an exception to the rule. Bee-keepers' conventions are fashionable, and I doubt not nearly all who can afford the time and money to do so, and, as in the fashionable world, probably some who cannot, are present with us to-night.

It gives me pleasure to meet you all at this annual gathering, but especially those who have been so long and favorably known by their excellent contributions to our bee-literature; and added pleasure comes to me in the opportunity it gives of meeting, face to face, so many of my Canadian relatives (cousins, I believe), who have so freely given me the credit of having an acrimonious feeling towards everything Canadian or English. It is not the first time I have received credit for more than I have deserved, and it is somewhat comforting to know that in this I have plenty of good company.

If you all knew, as some of you do, what a corporeal infliction has been threatened me, evidently by a Canadian, in case I "dared to put foot on Canadian soil," you might wonder how I dared to "beard the lion" in his den, and be in attendance at this convention. But when I tell you that a prominent member of this Association (also a Canadian), recently wrote me that if I was not here, "a vote of censure will be passed," you will readily see that I was "in a strait betwixt two," and I at once decided to run the risk of getting the first, rather than to suffer the last.

There is a fascination about courage, that human nature worships. No matter how uncouth, every one finds admirers the moment it is authentically announced that he is brave; and so, from this first and best of animated nature, the characteristic of unfailing courage is universally adored. In this instance, I lay no claim to this adorable quality, for in a letter received a few days since, from one of Canada's noted bee-keepers, he says: "Now don't let your fears get the better of you. I shall try hard to be there, and won't let anybody hurt you." So, as you see, I am here. But another thing confronts me, for on a postal, written with type-writer, some friend, who is very anxious about how I conduct myself, says: "Do try to overcome your surly manner at the convention. At least don't be cross all the time."

I can assure you that the anticipated pleasure in meeting with Canadian bee-keepers has had more to do with my being here than any other one influence, although I am grateful for the privilege of being, if only for a few days, in a country where "honey drops from the trees." How eagerly we scan the pages of the bee-papers for something from the pen of our favorite writers, but how much more pleasure in meeting such face to face in a gathering like this. As so fitly expressed in the last *Review*, "The one is a love letter; the other, the lover himself."

Things that address the ear are lost and die in one short hour; but that which strikes the eye, lives long upon the mind; the faithful sight engraves the knowledge with a beam of light.

I doubt not the most, if not all of you, have come here with the hope and expectation that this would be one of the most enjoyable and profitable meetings ever held by this Association, and such as bee-keep-

ers delight in attending. That such may be the case is doubtless the wish of all present. To make this wish a veritable reality, can best be accomplished by each one taking part in the discussions, and so contribute their portion of information for the general good.

Soil, air, sun and moisture are requisites to vigorous vegetable growth, but not the only requisites, for the house-plant has these; but in order to reach its most perfect development, it must be removed from its root-bound condition to its native soil, and the open air where root and branch may appropriate the nourishment that is all about it. In the domain of thought the same is true, and any one wishing to reach the highest attitude of attainment must have fellowship and communion with other minds; "establish a commerce for his thoughts." He must give as well as receive.

Good sense will stagnate. Thoughts shut up want air.
And spoil, like bales unopened to the sun.
Thoughts, too, delivered is the more possessed;
Teaching we learn, and giving we retain.
'Tis thoughts, exchange, which, like the alternate
Rush of waves conflicting, breaks the learned scum,
And defecates the student's standing pool.

Without this and kindred organizations, each bee-keeper would have to depend largely upon his own resources and experiments; struggling on without adequate knowledge; by slow and tedious process, gathering important facts to be used for a brief period, and then, with the possessor, be buried forever out of sight.

Men thus acting for themselves follow in a beaten path, or become selfish and reticent of their knowledge; "wise in their own conceits," and jealous of their dearly-acquired wisdom. If such an one gets into a gathering of this kind, he seems to feel that there is nothing for him to learn, and we rejoice when the scales fall from his eyes.

We have met here for the very same purpose for which other bee-keepers' conventions are held, which was so appropriately and beautifully told by the editor of the AMERICAN BEE JOURNAL, in his address at the recent meeting of the Northwestern Bee-Keepers' Society, at Chicago.

"We have come here," he said, "to talk over the past and learn wisdom from our experiences, and those of our co-workers. Light and knowledge, and power have been man's inheritance as the days have come and gone. The poet wisely remarks that—

"The waves that moan along the shore,
The winds that sigh in blowing,
Are sent to teach a mystic lore
Which men are wise in knowing.

"To this end have we come together, so that the wisdom of each one may be communicated to all, with the magnetic currents of personal contact and hearty fellowship.

"Mistakes are made, and reverses come, but these do not discourage, they only strengthen the determination to succeed. Of course we shall differ in our opinions, as do the greatest and best of men, but this should not give rise to any feeling of ill-will."

With this introduction, allow me to call your attention to some things in our specialty that have been, and are, attracting our attention and eliciting discussion in the bee-periodicals.

Within a few months, a new "disease" has made its appearance among some of the bees of Michigan, commonly recognized by its name, "digested nectar," and if our Canadian bee-keepers are not very careful, it will cross the line and get mixed with their "pure crystal linden" honey. I sincerely hope that the "Wolverines" will, if possible, confine it to "its native heath." It might not be unwise for this convention to pass resolutions of sympathy for such

bee-keepers as have the malady in their apiary, and appoint a committee to fully investigate and report upon the matter, giving them full power to send for persons and papers.

Perhaps the thing most desired by leading apiarists is the prevention of swarming. If what has recently been brought to our notice, in the invention of wooden brood-combs, by Mr. Aspinwall, of Michigan, proves to be what is claimed for it, that desire will, ere long, be satisfied. But

How seldom do our dreams come true—
The very thing our fancy lets
Us hope in time will be our own,
Some other fellow always gets.

We fall in love; the mind's diseased,
The brain is in a foolish whirl;
And while we worship from afar,
Some other fellow gets the girl.

Ah! what a torment life would be
If we were of all hope bereft,
That in some fairer world than this
That other fellow would get left!

During the present year there has been added to our bee-literature G. M. Doolittle's book on "Scientific Queen-Rearing;" and the Dadants have done the bee-keeping world a lasting favor in their splendid revision of "Langstroth on the Honey-Bee." Its division into numbered sections, and the frequent references from one to another, with its copious index and superb engravings make it one of the most, if not the most desirable work ever published on bee-culture, and it should be in every bee-keeper's library. These, with Prof. Cook's "Manual of the Apiary," "Quinby's Bee-Keeping" revised, and the "A B C of Bee-Culture," with a few of the many valuable and interesting books and pamphlets that have been written and published by the editor of the AMERICAN BEE JOURNAL, supplemented by the reading of half a dozen, more or less, of our leading bee-papers, will put the average bee-keeper in pretty good shape to get both pleasure and profit in attending and taking part in bee-conventions, whether there be "an axe to grind" or not.

But the "latest thing out" is a Honey Almanac for 1890, issued by the publishers of the AMERICAN BEE JOURNAL, and to my narrow vision it has entirely demolished the saying that "there is nothing new under the sun." At least one copy of it should be in the house of every family in Canada and the United States, and it rests with bee-keepers to see that such is the case.

The sending of bees by the pound through the mails has recently come under discussion. As is usual, such a course has its advocates and opponents, and would it not be well for this convention to consider the matter, and take some action in regard to it?

The queen of wild-flowers and honey-plants, the golden-rod, as a national flower for the Yankees, whose praises of late have been so frequently, fervently and eloquently sung, might not be averse to receiving some amorous attentions from the members of this association, without blushing. When in the field nodding to the breezes, or as a bouquet on the breast of a lovely woman, it possesses a beauty unequalled and unsurpassed by any other flower.

The honey crop in 1887 and 1888, to many of us, was a total failure, and to some even worse. For others, there was a partial crop, and to but few was there the usual yield, but a fairly good crop the past season, revived the failing spirits of many, if not the most of us, and I am quite confident that some who are here would not have been, had the honey yield been as light in 1889 as it was the two previous years. Owing to the meagre yield in 1887 and 1888, the price at some points was materially greater than it has been this year.

Taking the highest quotations of the market on the first of each of the last six months of each year, the price for comb and extracted honey was as follows:

1887.	Ext.	Comb.	1888.	Ext.	Comb.	1889.	Ext.
15½c.	5c to 8c.	San Francisco.	12c.	5½c to 6½c.			
		St. Louis.					
14c.	4½c to 6c.	15c.	4½c to 6c.	12½c.	5c to 6½c.		
		Chicago.					
18c.	8 4-5c.	17c.	8c.	13c.	8c.		
		Cincinnati.					
16½c.		15½c.		15½c.			
		Detroit.					
16½c.		16½c.		6c.			
		New York.					
16½c.	15c to 9c.	17½c.	7½c to 9c.	15c.	7c to 8½c.		

In Detroit, but four quotations are given for extracted honey—in December, 1887, and October, 1888, ten cents; in December, 1888 and 1889, nine cents.

In Cincinnati in July, August and September, 1887, 3 to 7 cents; October and November, 3½ to 7 cents; December, 3½ to 8 cents; in 1888 it was 5 to 8 cents except October and November, when it was 4½ to 8 cents; in 1889 the constant quotations have been 5 to 8 cents.

There are said to be over 300,000 beekeepers in the United States and Canada, and if each apiary contained but 15 colonies, the number reaches 4,500,000; and if these produced but an average of 30 pounds, the total honey production would be the enormous amount of 135,000,000 pounds, which at 10 cents per pound would amount to the snug sum of \$13,500,000. If each colony produced an average of one pound of beeswax, and it was worth 20 cents per pound, it would amount to \$900,000.

The Wiley liars, in their statements about manufactured honey, have found their *more* than match in Thomas G. Newman, who gives them no peace or comfort, but pounces upon them with a vigor that is worthy of the cause, and has made this portion of the Ananias family either drop dead at his feet, or has so weakened their voices as to make them almost inaudible. The other bee-papers have also done good service in this line, and the editor of *Gleanings* has a standing offer of \$1,000 to the person who will prove that the "wily" lie is the truth—a pretty good premium for one whose word is valueless.

Apis dorsata, and the "coming bee" have been sought for by our Mr. D. A. Jones with a push, energy, and perseverance that would not have dishonored a Yankee, and as yet without success. Well might he with the poet Secor say:

"Tis thus we're reminded, as time and again
Our hopes in things earthly are shattered,
That Solomon said, all things are but vain;
No matter how much they have flattered;
One certain, pure joy,
Content without alloy,
Shall come when ambitions are scattered.

But to the editor of one of Canada's bee-papers belongs the honor of recommending the most feasible plan yet suggested for securing *Apis dorsata*. He says: "Owing to the difficulty of transporting bees alive, we would suggest that the next enterprising individual take a package of... egg-preserved with him and secure drone and worker eggs and preserve and ship them to America, where they might be put in strong colonies, the drone eggs first, and the fertilized ones later, and *Apis dorsata* shall be ours."

The editor of the AMERICAN BEE JOURNAL thought so well of the scheme, that he suggested the name of a party who would take a half-interest in the enterprise. Who knows but that ere another gathering of this association, some enterprising Canadian or zealous Yankee will have acted upon the suggestion of the wide-awake editor, and have secured and introduced the "coming bee?"

Last year, through the efforts of your presiding officer, America's bee-keepers' poet laureate, the Hon. Eugene Secor, of Iowa, was induced to write two bee-songs, and our sweet singer, Dr. C. C. Miller, of Illinois, put "wings" to them in the shape of music, and the editor of *Gleanings* put them in print, and furnished a hundred copies of each, free of charge, for use at the Columbus Convention; and this year there has emanated from that hive of industry, the office of the AMERICAN BEE JOURNAL, another bee-song, the music of which is familiar to many, if not to all of you, a hundred copies of which Mr. Newman has furnished in the nice shape you see, for use at this meeting.

Last winter, I again tried to press Mr. Secor into service, and get more of "that which cheers, but does not inebriate." A portion of his reply was, "We have had a little 'old-fashioned' weather out here this winter—about 40 feet below zero," and adding, "Don't you pity us poor heathens who live—

"Way out upon the prairie, where
No Sabbath bell is heard,
No music but the sand-hill cranes,
And breezes, blizzard stirred?"

But keeping in mind the injunction, "be not weary in well-doing," and through the kindness of Dr. Miller, in writing the music, and the publishers of the AMERICAN BEE JOURNAL in printing it, we have another song that we can claim as our own; and all this gathered-grandeur without cost to the association or the bee-keeping fraternity. I hope that during the coming year there will be more added to this gathering sweetness, so that in the near future the songs sung at our conventions, both amusing and ennobling, may be such as are just fitted for the occasion, and enjoyable also in the family circle.

Upon the first mention of a World's Fair and Exposition to be held in the United States, in 1892, it occurred to me, as it doubtless did to many of you, that as beekeepers we should prepare for and make the grandest exhibit of the products of, and appliances used in, the apiary that was ever made anywhere. Canada's bee-keepers did themselves honor, and it was a credit to their good sense and energy, to make the grand exhibit they did at the Colonial Exposition in England, in 1886; but the bee-keepers of the United States ought to beat them so badly that they will be anxious for another opportunity to "show off."

In a letter received a week ago to-day, from a successful bee-keeper of New York, he says: "We ought to have a 'lay out' at the Exposition that will astonish the world." With this idea in view, and knowing that it is well to begin to move in fair and exposition matters in good time, I wrote to the managers of the enterprise in regard to the desirability of having such an exhibit, and received gratifying responses. The United States Government's Apianian Exhibit at Paris last summer was not much of a success, and could not be expected to be when it is known that bee-keepers had nothing to do with it, except to sell to its representatives, Prof. McLain and others, such things as they wished to put on exhibition. Is it not sincerely to be desired that the coming opportunity to make a display of the magnitude of our industry be improved to its fullest extent?

The changes that I would suggest to be made in the Constitution and By-Laws of the association are given on page 214 of the AMERICAN BEE JOURNAL for this year—a copy of which I have with me, so I will not take time here to mention them, but will mention them at the proper time. Is it not desirable that some plan be devised by which the Bee-Keepers' Union, the Honey Producers' Exchange and this association shall be combined?

The Union, under its efficient management, has accomplished much for our fraternity, and as "In union there is strength," ought not something to be done to make the Union stronger? Under the able leadership of its Manager, assisted by the Board of Directors, it has carried to a successful termination six cases in which bee-keepers have been brought before the Courts on account of damages claimed to have been done by their bees, and settled scores of disputes looking to lawsuits. I believe one case is still in Court, and funds are very much needed to carry it to a termination favorable to the cause of justice. "Money talks," and out loud, too.

The Supreme (supremely ridiculous) Court of New York has made itself the object of ridicule by its recent decision in such a case, and it is hoped and expected that when the case comes before the Court of Appeals, the utterances of the Lower Court will be so thoroughly "snowed under" that no summer's sun will ever be able to reach them. Is it not the height of folly for any one who has an apiary, or even keeps a few colonies, to ignore the fact that there is a constant danger of their being the next victim of "miss-placed confidence," and perhaps have on hand a fair-sized suit for damages, etc? Should not each give a helping hand towards furnishing the needed funds with which to defend the right, for it is *principles*, not men, that are being defended? But few Canadians belong to the Union, and not having an organization of this kind, would it not be well for them to give it their hearty support?

Up to the present time this Association, and so far as I know, all other bee-keepers' associations, have been accustomed to allow any one present to take part in and enjoy to the full, all benefits arising from asking questions and discussing subjects under consideration, whether members of the association or not. To me this course seems open to serious objections. At our homes, when those not members of our family come to see us, we show them the utmost consideration, and provide for them the very best we have, and wish them to occupy the best and most luxurious seats we possess, if it be nothing better than a hard-bottom chair. Would it not be to our credit as an association, to provide equally well for our bee-keeping visitors, by furnishing them with reserved seats, and hope that, like the visitors at our homes, they will not "wear their welcome out?"

To those who are at an expense of from ten to one hundred dollars, or even more, besides several days of valuable time, for the sake of reaping benefits that come from association and contact with kindred minds, should be granted the privilege of occupying the floor and doing the pleasant, satisfying and solid work of the convention. A fit name for such people as object to becoming members by the payment of the small fee, and yet wish to reap its benefits, I first heard used by the staid editor of the *Review*, and those of you who are so fortunate as to have the pleasure of his acquaintance, can readily imagine how his lips appeared when he called them "absorbers." Appropriate name! Grand title! To such visitors as are not, and do not expect to become bee-keepers, we extend a most cordial welcome at all times, and shall be glad to have such occupy seats at our table, and participate in and enjoy our social chat.

Since writing the above, the *Review* for November has come to hand, and on this subject, among other things in regard to this matter, Dr. Miller says: "Here is one man coming hundreds of miles at the expense of \$50 or \$100, who promptly pays his membership fee with no feeling that there is any hardship about it, and right by his side sits a man who lives hard by; sits

through a part of all the sessions, imbibing all he can (why didn't the Doctor say absorbing) that is to be learned, but is suddenly struck with paralysis, when those present are asked to walk up and pay their dollars. If anything is said to him he may reply: 'I just dropped in awhile to see what is going on; I don't know that I can be here after this session, so it's hardly worth while to become a member'."

Since the last meeting of the Association the sleepless destroyer, Death, has invaded the ranks of our fraternity, and quietly and noiselessly removed many loved ones, adding their names to the long list of those who have passed from this sphere of labor, and enjoyment, as well as disappointment, to try the realities of "the beyond." Many of these were to us unknown, but, without doubt, you will all remember the name of Mrs. Mahala B. Chaddock, whom we expected to have met here, and who so recently passed away, while, we may almost say, the ink from the pen that wrote for our entertainment was scarcely dry. The last verse of a poem written by her for the Nov. number of the *Illustrated Home Journal* seems now to have been written for herself. She says:

I am swinging in my hammock old,
And I look away to the hills of gold,
Where the reaper binds with ruthless hold,
And gathers the golden sheaves,
'Tis meet that ripened grain should fall,
And the Heavenly Father watches all;
But o'er our lives there hangs a pall—
She sleeps 'neath the whispering leaves.

E. C. Jordan, of Virginia, who has frequently contributed to our bee-literature, has passed away, and none of us knows who will be the next.

It has been truthfully said that in the course of human events we all have our joys and our sorrows, which are deep and abiding. It becomes us then to accept these joys, and, as best we may, modify our griefs by a more thorough devotion to the duties before us, ever thankful to the Great Power which controls all for the manifold blessings received.

Mr. John Little, of this Province, Ont., in an after-dinner speech at a meeting of the American Horticultural Society, said that he put horticulture and religion together, and was sorry he had not commenced earlier in life.

We can substitute bee-keeping for horticulture, or what would be better still, add it to the others, for horticulture, bee-culture and religion make a trio that go well hand in hand, and if any of us are laggards in either respect, let us rectify the mistake at the earliest possible moment, for,

This life to toll is given,
And he improves it best,
Who seeks by patient labor
To enter into rest;
Then pilgrim, worn and weary,
Press on, the goal is high;
The prize is straight before thee—
There's resting by and by.

In closing, I wish to tender this association my profound and sincere thanks for the confidence reposed in me, as shown by your having twice chosen me as your presiding officer.

I accepted this evidence of your esteem, with an earnest desire to discharge the duties of the office acceptably, but with no idea of doing it as acceptably as have the ably, illustrious, scholarly, eloquent and noted men who have preceded me; but I shall ever remember with gratitude this unexpected evidence of your esteem.

With the most earnest and sincere desire for the success and happiness of you all in your chosen vocations, as the years go by, I wish you all God-speed.

A. B. MASON.

The address of the President was referred to a business committee as follows:

Prof. A. J. Cook, Chairman; E. R. Root, F. H. Macpherson, M. Emigh, Wm. Couse, J. R. Howell, Wm. Hislop.

After the reading of the President's address, the meeting adjourned until 8:30 a.m.

SECOND DAY.

MORNING SESSION.

President Mason called the meeting to order at 8:30 a.m., and the convention listened to the reading of an essay written by Miss H. F. Buller, of Campbellford, Ont., on

Bee-Keeping as an Occupation for Women.

The question may be, and no doubt often has been asked, "Is bee-keeping a suitable or desirable occupation for women?" and after having given it a pretty fair trial for the last eight years, I am of the opinion that there is no reason why any woman of moderate strength and intelligence, should not be able to take charge of an apiary of from 30 to 50 colonies, with very little assistance, and derive both pleasure and profit from the employment; at the same time, I doubt whether there are many who would succeed very well in carrying on the business alone, though of course there are a few who would.

In reading the numerous bee-papers that are published now-a-days, one frequently meets with articles on the subject of, whether it is best to make a specialty of bee-keeping, or combine it with some other occupation. Now I do not believe that the farmer can carry on both farming and bee-keeping successfully himself, but if he has either daughters or sons, who will make a specialty of this department, bee-keeping, it may very advantageously be combined with farming; and I do not know of any reason why girls might not make as great a success of the business, as boys.

The wife is supposed to have her hands quite full enough with household work, and, I may say, her head, too, and for any one, either boy or girl, man or woman, to do any good with bees, they must give them their individual attention, and be really interested, and enthusiastic over their work.

"Eternal vigilance is the price of success" in any business, and in none more than in bee-keeping. It is not only labor, but a science, and will make constant demands, not only on the patience, but on the bodily strength and intelligence of those who engage in it; at the same time there is a fascination about the business which relieves it of all tediousness. A woman will think of her bees, study about them, and become so interested as to be almost paid for her work by the love of it.

I believe it would be well worth while for any one who has not been in the way of having the management of an apiary, to spend one season with a skillful bee-keeper before embarking in the business on his own account, as he would then find out not only the best methods of working, but also whether the kind of work suited him. However, even with this preparation, all will not succeed, for I know a lady who took this course, and afterwards failed entirely when she was working for herself; while others, who have only learned what they could from books and papers, besides the suggestions and instructions given them by more experienced bee-keeping friends, have done very well.

In conclusion, I may say that a great deal of the work in the apiary is quite as well adapted for women as for men, and also in

the care of the honey, and in preparing it for market.

Where they are most likely to feel their deficiency, is in the lack of skill to do the various carpentering jobs that seem to be inseparably connected with bee-keeping. I imagine that it is the exception, rather than the rule, to find a woman who knows how to handle carpenter's tools, though even this they may acquire enough of to answer the purpose, where there is a necessity for doing so.

HENRIETTA F. BULLER.

Miss Buller's essay was then discussed as follows:

Prof. A. J. Cook—The key to the situation is just this: Give the children some bees of their own. Do not give them the bees and then take the honey and sell it, and pocket the money.

R. L. Taylor—Bee-keeping is as good as anything to furnish ladies a healthful, out-door occupation; but the question is, whether it is the best thing for them as a business. For some ladies it is all right. Some women can lift a barrel of flour; I have seen them do it. Some men are not strong enough, physically, to make a business of bee-keeping. We must look at this as a business. All kinds of business can be carried on with but little demand for physical strength—sections can be put on and taken off one at a time—but the question is, does it pay?

O. L. Hershiser mentioned that two girls had done most of the required work with his bees the past season, and, as their part of the proceeds, they now had \$75.00 in the bank.

R. McKnight thought that perhaps 75 per cent. of women would succeed as well as men at keeping bees.

Wm. Sawyer said that a woman was not capable of managing a large apiary.

Geo. H. Ashby—Some of you speak about the healthfulness of bee-keeping, and that it is on this account that ladies take up the pursuit. Now, I would like to have you show me the woman that thinks that bee-keeping is healthful, unless she also finds it profitable.

C. P. Dadant—There is much connected with bee-keeping that ladies cannot do, but they can have it done.

R. McKnight, of Owen Sound, Ont., followed with an essay on

Cellar vs. Out-Door Wintering of Bees.

I have been assigned the duty of saying a few words on the subject of wintering bees, with the view, I suppose, of opening up a discussion on this important matter.

Safe wintering is of prime importance to success in bee-keeping, in high latitudes, hence the best method of accomplishing this cannot secure too much attention, for upon it depends, in a large measure, the result of the season's work.

I am not expected to treat the subject exhaustively—this is clear, from the fact that I am limited to eight minutes in discussing it.

Successful wintering, either in-doors or out, depends not so much upon where bees spend their quietude and repose, as how

they are treated during the time of their activity.

Preparation for winter should begin when the first notes of our sylvan songsters fall upon the ear, as they return from their temporary stay in the Sunny South—

"When through the neighboring fields the sower stalks,
With measured tread, and liberal throws the grain
Into the faithful bosom of the ground."

It should continue while the floral world fills the air with its balmy odors, and nectar is being distilled in plenty. It should go on

"While the mower, sinking, heaps o'er him
The humid hay, with flowers perfumed;"

and only cease when on the last mellow autumn day

"The insects swarm from their dark nooks
To sport through one day of existence more."

It is only then that the bee-keeper's work of preparation should cease, and that of "gathering in one group his pets" be entered upon, that in peace and safety they may pass the time when

"The sky saddens with the gathering clouds,
And through the hushed air the whitening storm deepens."

If only proper treatment be accorded bees throughout the successive stages of their active life, it is not a matter of vital importance whether they spend their season of repose in the cellar, or out-of-doors, provided that they be properly protected.

Preparation is not my theme, however. My text has been furnished me, and I must stick to it—"Cellar vs. Out-Door Wintering of Bees." "That's the question." As it stands, I suppose I am expected to put in a strong plea for the cellar, but I am somewhat at a loss to know just what "cellar" means in my text. Usually it is an elastic term that may mean anything from a damp and dismal hole in the ground, to a well-built, well-ventilated, and well-appointed apartment.

If I am to understand "cellar" to mean the underground room of a dwelling-house, well-built and well-ventilated, then it will be a safe enough place in which to winter bees. However safe it may be, if this be the cellar of my text, I must at once declare myself in favor of the out-door system, for I am entirely opposed to the use of the house-cellar as a winter storing-place for bees, to any great extent.

I am opposed to it, not on the bees' account, but on sanitary principles. When a cellar is so used, it cannot be other than disagreeable to those that live over it. The exhalations thrown off by the bees, floating up, as it will, and diffusing itself through the atmosphere of the rooms above, must be the reverse of agreeable to people who inhale it. It may be worse than disagreeable—it may be positively injurious to health. I incline to the belief that it is so.

If there be such a disease as "bee-asthma," and if it is so contracted by inhaling the odors arising from an open hive in the open air, how much more likely is it to manifest itself when its inhalation continues for months at a time. For these reasons, I cannot advocate cellar-wintering in the literal sense of the phrase.

An underground, or partially underground, structure is, however, in my judgment, the best wintering place—best because most convenient and economic, both of which are important considerations. Speaking as I do from years of experience in various plans of wintering bees, carried on simultaneously, I know whereof I affirm.

During these years I have had two beeyards—some years three. At home I winter my bees in a bee-house. At the out-apiaries I pack them on the summer stands, or in clamps, and my experience convinces me that the in-door plan has the advantage

of the out-door one, in these two important matters—convenience and economy.

The convenience consists in the ease and rapidity with which the hives may be put in and taken out; the economy consists in conserving heat and saving honey.

I shall not enter into the consideration of which is the safer, for I believe safety may be insured by either plan; but content myself with showing that convenience and economy both range themselves on the side of indoor wintering.

Admitting one has on hand the cases and clamps of former years, the work of packing for winter outside is still a labor of some magnitude. The cases must be placed in position, the hives moved into them, sawdust or other suitable material procured; and the packing done. All this consumes time, and recurs with every returning winter. Compare this work with the simple labor of transferring from the yard to the bee-house, and it is a mere bagatelle.

The economy of the indoor, as compared with the out-door method, must be apparent to every one who has given the matter any thought at all. In the former, the heat generated by the bees when together, may be employed in maintaining a uniform and suitable temperature, resulting in a continued state of quiescence and comfort, which state reduces the consumption of stores to a minimum.

My own experience goes to show that one-half the amount of honey per hive will serve to winter in the house, required to bring them through outside. This saving is of great importance to the bee-keeper in more respects than one. It often enables him to winter his bees without fall feeding, when otherwise it would be necessary for him to do so. If the stores be ample, it is no less advantageous, for it saves honey, which means money.

Let us take, for example, a bee-keeper who has 200 colonies. Five months will be the average time of confinement in winter quarters. Say it requires $1\frac{1}{2}$ pounds per colony per month inside, and 3 pounds outside; there will be a saving of nearly 8 pounds of honey per colony in favor of the bee-house, or 1,600 pounds for 200 colonies; 1,600 pounds at 9 cents per pound, is \$144.

But it may be urged that the extra cost of the building will more than counterbalance the saving in honey. This I am not prepared to admit. Three hundred dollars, at most, will serve to construct a bee-house, where labor and lumber are not excessively high. The expenditure once incurred, no further outlay will be necessary for a lifetime; while the building may be made to serve the purpose of a first-class extracting room, or a store-house in summer.

On the other hand, no satisfactory plan of out-door wintering can be adopted without considerable outlay in labor and money. If the single-clamp plan be practiced (and I hold this to be the best plan of out-door wintering), it will require 50 feet of lumber, at least, for each outer case, or 10,000 feet for 200 colonies. This, at \$9.00 per thousand feet, represents \$90.00; for labor and nails, say 15 cents per colony, \$30.00; sawdust or other packing material, 5 cents each, \$10.00—or \$130.00 in all. This will cover half the cost of a permanent structure, in every way preferable. To this we must add twice the consumption of honey annually.

It is easy, therefore, to determine which plan in the long run is most economical, to the man who keeps from 100 to 200 colonies; and it is to such that my remarks more immediately apply.

Bee-keepers having a less working-force, should regulate their practice by the circumstances in which they find themselves.

R. McKnight.

The following discussion of Mr. McKnight's essay then took place:

Prof. Cook—Have you found cellar-wintering of bees equally safe with out-door wintering?

Mr. McKnight—So far as my experience has gone, the greater safety has been with the in-door plan.

Dr. A. E. Harvey—If the dead bees are kept properly cleaned up, and the cellar ventilated, there will be no danger to health, by having bees under the living-rooms.

J. Sturgeon had 200 colonies, and out-door wintering had been the most successful with him. Locality, the hive, and food, made all the difference in wintering, in his opinion. He used chaff hives, and had high board wind-breaks. Late disturbance is an injury. Possibly he did not understand the plan of in-door wintering.

R. L. Taylor—At what temperature did you keep the cellar?

J. Sturgeon—40° to 45°, as nearly as possible.

R. L. Taylor—Well, how near?

J. Sturgeon—Well, within 10° to 15°.

Rev. W. F. Clarke preferred out-door wintering, but wished to have the hives raised a foot from the earth. Whether in-doors or out-doors, hibernation is what is needed.

R. L. Taylor—How are we to make them hibernate?

W. F. Clarke—It is mainly a matter of temperature, but not wholly. We cannot always induce this condition.

Geo. H. Ashby—One trouble is, that experiments are not decisive. One man puts all his bees into the cellar; another leaves them all out. Part of mine are left out, and part put into the cellar. Those in-doors consumed $9\frac{1}{2}$ pounds per colony, in 5 months; those out-doors consumed 13 pounds. Those wintered in the cellar swarmed earlier, and stored the most surplus. The trouble with cellar-wintering is, that the bees are put out too early in the spring. Hives last longer when they are in the cellar during the winter.

S. Corneil—In weighing colonies, did you take into consideration the weight of the brood?

Geo. H. Ashby—There is so little brood, that it is of no account.

S. Corneil—The object of putting bees into a cellar, is to aid them in keeping up the proper temperature inside the hive. If they are properly protected, the out-door plan is equally as good.

E. R. Root—In our locality (Medina, Ohio), the consumption of stores is about 13 to 15 pounds per colony in out-door wintering. We have wintered but few bees in the cellar, but we have put in about 40 colonies this winter, and were surprised to see with how little labor they were put into the cellar.

Prof. Cook—We need have no fears of ill-health from having bees in the cellar, if the cellar is ventilated as all cellars ought to be. I think that sub-earth ventilation is not needed, unless it be used to control the temperature. I know of many who have wintered hundreds of colonies with no sub-earth ventilation.

S. Corneil—The only advantage of sub-earth ventilation, is that it may be used in tempering the air by bringing it in under the earth. I venture to say that I can winter bees in a temperature of 25°, by having the walls of the hive thick.

J. B. Hall—Where is the man who winters his bees out-of-doors? You all talk about out-door wintering, but when it comes right down to it, if you do not put your bees into a cellar, you build a little cellar around each colony. Why not put them all into one big cellar?

R. L. Taylor—It has been urged that bees should not be taken out of the cellar too early. My experience is, that it is better to take them out early. If they have wintered well, there is no danger of spring dwindling.

The convention then adjourned until 1:30 p.m.

AFTERNOON SESSION.

President Mason called the meeting to order at 1:30 p.m., and the convention then proceeded to select the place for holding the next meeting. Keokuk, Iowa, was chosen, and the election of officers was then held, which resulted as follows:

President—R. L. Taylor, Lapeer, Mich.
First Vice Pres.—Eugene Secor, Forest City, Iowa.
Secretary—C. P. Dadant, Hamilton, Ills.
Treasurer—Dr. C. C. Miller, Marengo, Ills.

The other Vice-Presidents are to be chosen by the executive committee.

REPORT OF COMMITTEE ON RESOLUTIONS.

The report of the Committee on Resolutions was read and adopted. It is as follows:

Resolved, That the cordial thanks of this Association are due, and are hereby tendered to the Brant Bee-Keepers' Association, for its kind invitation (extended at its last session) to meet at Brantford, and for the generous and efficient manner in which it has received and entertained this convention.

Resolved, That our thanks are also tendered to the Mayor and City Council of Brantford, who have so kindly carried out the evident wish of the city, in granting us the free use of this hall, and in giving us a generous welcome.

Resolved, That the thanks of this Association are due, and hereby extended to such bee-periodicals as have given us the gratuitous use of their columns for notices of meetings, and in other ways given their assistance to make this meeting a success. And to the city and other papers who have kindly published our proceedings, and for the correct manner in which they have reported our meetings.

Resolved, That the thanks of this Association are due and hereby tendered to the quartette who so kindly assisted in enlivening our session by the singing of our bee-keepers' songs.

Resolved, That the thanks of our Association are due and hereby tendered to the hotels and

railroads for reduced rates and accommodations.

Resolved, That having been informed by a communication from ex-President Thomas G. Newman (read by the President), of the severe illness of his wife, and of his regret at not being able to be with us in this convention, we hereby tender him our most cordial sympathy, and express our sincere regrets that he is not permitted to be with us.

To the Rev. L. L. Langstroth, the acknowledged father of modern apiculture, who is with us in thought but absent on account of failing health, we send most cordial greeting, and wish him a restoration to health and strength, and express our regrets that he is not here to cheer us by his presence, and enlighten us by his counsel and wisdom.

To S. T. Pettit, of Belmont, Ont., and E. D. Keeney, of Arcade, N. Y., who send regrets for their inability to be with us on account of ill health.

To J. Y. Detwiler, of New Smyrna, Fla., who came so far as Toledo, O., and was prevented from attending this convention because of the death of his father, we also send words of cheer and our regrets at their enforced absence.

R. F. HOLTERMANN, *Com.*
R. L. TAYLOR.

The following telegram was sent to Father Langstroth: "The International bee-keepers send affectionate greeting, and wish you were here."

Next came an essay from S. Corneil, of Lindsay, Ont., upon

Heat-Retaining Hive—How it is Best Obtained.

Regarding the protection of bees against cold in winter, and during the time of rapid brood-rearing in spring, I take the ground that warm air inside the hive is of the first importance, and that the temperature of the air outside the hive is only a secondary matter, provided the hive walls are composed of good heat-retaining materials. In a hive of bees we have, as it were, a self-acting furnace, keeping up a constant temperature of 65 degrees in the centre, and at least 50 degrees in the atmosphere immediately surrounding it, when the bees are the most quiescent.

As with live stock during our winters, so with bees, the better the heat is retained in the air in contact with them, the less food they consume, and the less vital work is required to keep up the standard temperature. That much of the heat generated may be retained by the selection of the best materials for the hive, is evident from the following account given by Prof. Pepper, in his work on "Heat":

"One of the most interesting novelties displayed in the department devoted to Norway, in the French Exhibition of 1867, was the self-acting Norwegian cooking-apparatus, constructed in the most simple manner, of a wooden box lined with four inches of felt, in which the sauce-pans containing the food, previously boiled and maintained at the boiling-point for five or ten minutes, according to the nature of the food to be cooked, are placed. The heated sauce-pans are covered with a thick felt cover, and the lid of the box being fastened down, the rest of the cooking is done by slow digestion, no more heat being added.

"The heated vessels containing the food will retain a high temperature for several hours, so that a dinner put into the apparatus at 8 in the morning, would be quite hot and ready by 5 in the afternoon, and would keep hot up to 10 or 12 at night, because the felt clothing so completely prevents the escape of the heat; and as the whole is enclosed in a box, there are no currents of air to carry off any other heat by convection.

"The principle on which this cooking-apparatus acts, is that of retaining the heat; and it consists of a heat-retainer or isolating apparatus, shaped something like

a refrigerator, and one or more sauce-pans to fit into it."

In selecting the materials for hives, with a view to the greatest warmth, it should be remembered that air conducts nearly twice as much heat as cork, the ratio being as 49 to 29. Carded wool and wool-felt conduct about four times as much as cork. Blotting-paper conducts about as much as wool. Sawdust conducts about seven times as much as cork. Wood generally conducts seventeen times as much heat as cork, "more than four times as much as wool, and more than ten times as much as air."

Cheshire says, "If a hive side of $\frac{3}{4}$ -inch zinc have its protective power represented by 1, that of a double side with dead (?) air space would equal 4, while the same wooden sides packed tightly with chaff would equal 10." "Further experiments proved that the cork-dust in lieu of the chaff-packing, gave a non-conductivity to be represented by 14."

My own experiments have satisfied me that straw is a much better heat-retaining material than wood. Each straw has a dead-air chamber between the joints, and when the straws are pressed together, the air lying between them is comparatively "dead."

I made some experiments last winter with an old-style Jones' hive made of straw, and a single-walled eight-framed Langstroth hive. I found that the same quantity of hot water cooled much more quickly in the Langstroth. For covering hives on top, there is nothing available as good as quilts filled with sheep's wool. There is a kind of batting used by upholsterers which I think would answer nearly as well. It is made of old woolen rags, and costs, at wholesale, less than half the price of wool.

Cork-dust at wholesale costs about five or six cents per pound. A cubic foot well packed weighs about eight pounds. About three pounds will be required to give $1\frac{1}{4}$ inches of filling for the walls of ordinary hives. I use picture-backing and three thicknesses of carpet felt-paper for the inner skin of my hives, and $\frac{3}{4}$ -inch pine for the outer skin. Hives with walls thus filled will measure about $2\frac{1}{4}$ inches larger each way. They will weigh about five or six pounds more, and will cost about as much more as single-walled hives of the same capacity.

The question which every bee-keeper will ask before incurring the extra expense is, Will it pay to use these double-walled hives? I think it will be admitted that their advantages for early spring brood-rearing are as great as for wintering; but leaving the former out of the question, if, during the time one of these hives lasts, it should be the means of saving in good condition a colony of bees, which in a single-walled hive would have died, it will pay to use hives with packed walls.

S. CORNEIL.

Mr. Sturgeon used and preferred the chaff hive.

J. B. Hall—Yes, but there are really a lot of little cellars, with a tube from each, through which the bees may fly. Mine are in one large cellar, with no tube for them to fly out.

Mr. Sturgeon—Yes, but I have tried putting bees in a cellar in chaff hives.

J. B. Hall—Yes, yes; but you protected them too much. When I go into a warm room, I take off my overcoat.

J. B. Aches—Does Mr. Sturgeon give upward ventilation to his hives in the cellar?

Mr. Sturgeon—No, sir.

S. Corneil—A covering of enameled cloth amounts to nothing, in the way of retaining heat. Such covers must be covered with some non-conductor of heat.

Geo. H. Ashby said it made no difference if the cellar were damp, if the temperature were high enough.

R. L. Taylor had several times tried wintering bees out-of-doors, and they had never wintered so well as in a cellar. He had bees in two cellars. One cellar is made under his house. There is a furnace in it, and the cellar is dry. The other is under the barn, and has a cistern in it, and is damp. He could see no difference in the wintering of the bees in the two cellars. There is just this much about it: In a damp cellar, the temperature must be kept higher.

Adjourned to meet at 7:30 p.m.

EVENING SESSION.

The meeting was called to order at 7:30, with President Mason in the chair. This session was opened very pleasantly by the singing of the several bee-keepers' songs. The last one sung was the one that appears on page 772 of the AMERICAN BEE JOURNAL. This was new, and "brought down the house." It did us good to see the staid and sober President Mason, so far forget himself as to slap his knees, tip back his head and shake his sides with laughter.

Should Bee-Keeping be Combined with some other Business?

R. L. Taylor—No. We find life none too long to perfect one occupation. If there is added to this regular money-making occupation, some other money-making occupation, there can never be so great a success. I think I can make more money by choosing some one business, and putting my whole soul and life into it. But my nature rebels at such a course; there are some other things that I like to do as well as bee-keeping; so I have sacrificed my love of money for the pleasure of having more than one pursuit. In the summer the bees require close attention, and any pursuit to combine with bee-keeping, must be one that will require but little attention at that time. Small-fruit growing, that has been so often mentioned, is a very poor one. In many places, grape-growing, or the raising of pears or plums would work well with bee-keeping. But the question always comes back to me: "If bee-keeping is so profitable, why not keep more bees? Or, if it is not profitable, why follow it at all?" If a man does his work in the winter as he ought to, he can care for 300 colonies of bees.

Mr. F. H. Macpherson, of Beeton, Ont., then read the following essay:

Shipping Queens.

The most that I can say on this subject will probably not be new to the majority of you, but as I shall detail the system practiced in our own apiary, there may be some points which may interest even the older heads who have perhaps had a great deal more experience than myself.

I take it that the point in the queen-breeder's work—where my subject shall properly commence—is when he has his queens mated and ready to forward in fulfillment of the various orders received or expected.

The three principal items for consideration are: 1. The cage. 2. The food. 3. The mode of caging. I shall discuss these in the order in which I have named them, as it appears to be their natural sequence.

THE CAGE.—It requires to be light, strong and free from absorbent qualities. We have made them from pine, cedar, balsam, spruce and basswood, and like them in the order named. Pine seems to conform to all the requirements named; better than any of the others; cedar is light, but not so strong; balsam is light, soft, not liable to split, and a good non-absorbent, but with us it is not easily obtainable; basswood is strong and less liable to split, but it has the disadvantage of absorbing moisture, and will soon become sour, unless kept in a dry atmosphere; spruce is light, but it is usually hard and flinty, and is very liable to crack.

The shape of the cage has not so much to do with successful shipping, as has the ventilation; and I am of the opinion that a good many queens are lost through over-ventilation. It is surprising to notice how little air will suffice.

Another fruitful source of loss is from the sudden change of temperature when in the mails. This may, to a great extent, be overcome by wrapping the cage in a single thickness of ordinary manilla-paper.

The immediate requirements of every cage are—a sufficient space in which to place the queen and the attendants, and another space in which to put the food, so connected with the first that the queen and her retinue may get at it as they require, and yet not become fastened in it, or daubed by it.

THE FOOD.—This is probably the most important item connected with the whole business of shipping queens—the "weal or woe" of more queens depends upon this than upon all other things combined. There are, perhaps, as many different kinds of foods made and recommended as there are different methods of curing bee-stings, but, as in the latter case, what proves of service to one is of no account with another.

We have tried many different mixtures with varying results. The "Good" candy seems to be generally recognized as having merit, and our success with it has been fair. We have also obtained uniformly good results from the use of a food made after the following formula:

Take absolutely-pure granulated sugar and pulverize it. Put it in a granite dish and pour over it enough pure honey (first having heated the honey to a little below the boiling-point), to thoroughly saturate it, and stir the mass until the sugar and honey are well mixed. Then place the vessel in hot water, in which it should be allowed to stand (keeping the water about the boiling-point) until the sugar and honey become thoroughly incorporated. When cool it will be found quite waxy. It will not melt and run easily, and the bees take it very kindly.

During the past season we have sent out many hundreds of virgin queens, and the work of preparing the food as given above, was more than we cared to undertake for such a large number. We also desired a

less costly food. We received in the spring, from Mr. W. P. Henderson, of Tennessee, a half-dozen young queens which reached us in a fine, healthy condition, and which appeared to be fed on pure honey, and we felt that Mr. H. was practicing the plan we wanted.

We ascertained from him that he used short-staple raw cotton, just from the gin, after being separated from the seed, which he saturated with the ripest and thickest honey that he could get, and which he then placed tightly in the trough of the cage, to keep it from leaking and bedaubing the bees.

One pound of the raw cotton holds sufficient honey for a thousand cages, at a cost of ten cents for the cotton. During the season we shipped nearly all our queens on food prepared in this way, and we found that in the majority of instances they reached their destination in splendid condition.

I wish to particularly emphasize the idea that nothing but the purest of sugar should be used—adulterations of this article have cost us the lives of a good many queens.

MODE OF CAGING.—Complaints are sometimes heard, of queens which do not lay on introduction after arrival at their destination, even though they may have been good layers before being shipped. The treatment of queens before shipment, and the mode of handling when caging, has a good deal to do with this trouble. If a queen be taken out of the hive when she is actively engaged in egg-laying, there is considerable danger of injury, through close confinement and through the jarring and shaking which she will receive in the transportation by mail, and we have known such queens to cease laying almost entirely after a long journey. The remedy for this is, to allow them to rest a day or two before shipment.

We have seen students, in catching queens, take hold of them by the abdomen or the head. This is detrimental in many cases to the egg-laying qualities of the queen, especially if any pressure is exerted. She should always be caught by the wings, and held only as short a time as possible.

They should be handled very carefully and gently, so that they may not become excited, and on being taken from the hive, they should at once be transferred to a dark spot as near the temperature of the inside of the hive as possible. If allowed to remain in the hot sun, they receive what we might call a sort of sunstroke, and their egg-laying qualities seem to be impaired.

We generally ship queens by a mail, which leaves late in the day, and, if possible, we always like to have the queens caged, and placed in a dark room for two or three hours before they are sent off. They are thus less excited, and stand the journey better. F. H. MACPHERSON.

E. R. Root showed and described the Benton shipping-cage. One trouble, he said, with the Peet cage, is that the space is too large, and one side is of tin. This allows the bees to slip about too much. They had been using the Benton cage, with the best of success, the past season. After much experience, they had found 20 bees were about the right number to put in the cage. They had arranged the Benton cage so that it might also be used as an introducing-cage. He had watched the matter closely, but had seen no proof that queens are injured by shipping immediately after caging.

Adjourned to meet at 8:30 a.m.



ALFRED H. NEWMAN,
BUSINESS MANAGER.

Business Notices.

Read our Book Premium offer on the last page of this JOURNAL.

Money in Potatoes, by Mr. Joseph Greiner. Price, 25 cents, postpaid. For sale at this office.

Send us one **NEW** subscriber, with \$1.00, and we will present you with a nice Pocket Dictionary.

Red Labels are nice for Pails which hold from 1 to 10 lbs. of honey. Price \$1.00 per hundred, with name and address printed. Sample free.

Calvert's No. 1 Phenol, mentioned in *Cheshire's Pamphlet* on pages 16 and 17, as a cure for foul brood, can be procured at this office at 25 cents per ounce, by express.

The date on the wrapper-label of this paper indicates the end of the month to which you have paid. If that is past, please send us a dollar to advance that date another year.

Please send us the names of your neighbors who keep bees, and we will send them sample copies of the *BEE JOURNAL*. Then please call upon them and get them to subscribe with you.

As there is another firm of "Newman & Son" in this city, our letters sometimes get mixed. Please write *American Bee Journal* on the corner of your envelopes to save confusion and delay.

We have some full sets of the *BEE JOURNAL* for 1889, and new subscribers can have the full sets for 1889 and 1890 for \$1.80 until all are gone. Or, we will send the full sets for 1887, 1888, 1889 and 1890 for \$3.00.

Systematic work in the Apiary will pay. Use the Apiary Register. Its cost is trifling. Prices:

For 50 colonies (120 pages)	\$1 00
" 100 colonies (220 pages)	1 25
" 200 colonies (420 pages)	1 50

When talking about Bees to your friend or neighbor, you will oblige us by commending the *BEE JOURNAL* to him, and taking his subscription to send with your renewal. For this work we will present you with a copy of the *Convention Hand Book*, by mail, postpaid. It sells at 50 cents.

We offer the *Monthly Philadelphia Farm Journal*, and either the *AMERICAN BEE JOURNAL* or *ILLUSTRATED HOME JOURNAL* from now until Dec. 31, 1890, for \$1.20. Or, we will give it free for one year to any one who will send us one new subscriber for either of our Journals with \$1.00 (the subscription price).

A New Method of Treating Disease. HOSPITAL REMEDIES.

What are they? There is a new departure in the treatment of disease. It consists in the collection of the specifics used by noted specialists of Europe and America, and bringing them within the reach of all. For instance, the treatment pursued by special physicians who treat indigestion, stomach and liver troubles only, was obtained and prepared. The treatment of other physicians, celebrated for curing catarrh, was procured, and so on till these incomparable cures now include disease of the lungs, kidneys, female weakness, rheumatism and nervous debility.

This new method of "one remedy for one disease" must appeal to the common-sense of all sufferers, many of whom have experienced the ill effects, and thoroughly realize the absurdity of the claims of Patent Medicines which are guaranteed to cure every ill out of a single bottle, and the use of which, as statistics prove, has ruined more stomachs than alcohol. A circular describing these new remedies is sent free on receipt of stamp to pay postage, by Hospital Remedy Company, Toronto, Canada, sole proprietors.
51D26t 1mly.

A Special Club Rate.

A Magazine of the choice literary character which the *ILLUSTRATED HOME JOURNAL* sustains, will add many pleasures to any "family circle." Its beautiful illustrations and interesting reading-matter will make it heartily welcomed at every "fireside" in the land.

We desire that every one of our readers should secure its regular visits during the year 1890, and in order to induce them to do so, we will make this tempting offer:

We will Club the *AMERICAN BEE JOURNAL* and the *ILLUSTRATED HOME JOURNAL*, and mail both periodicals during the whole year 1890 for \$1.50, if the order is received at this office before January 1, 1890.

Such a remarkably low club rate as the above, should induce every reader of the *BEE JOURNAL* to accept it without a moment's delay.

As a further inducement, we will mail the superb number for December, 1889, free to those who send their subscriptions early; that is, until all the December numbers now on hand are taken.

New subscribers to the above club will have the December numbers of both of the JOURNALS free—as long as the stock lasts. So the sooner they subscribe, the more they will get for their money.

Some have requested us to print a card on a less number than 100 Honey Almanacs, and we have concluded to accommodate them. We will furnish 25 copies with card printed on the first page, **postpaid**, for \$1.10; 50 copies for \$1.70; 75 copies for \$2.30. See prices for more on the page 822.

Subscribers who do not receive this paper promptly, will please notify us at once.

Honey and Beeswax Market.

DETROIT.

HONEY.—Demand is fair for comb at 13@15c. per lb. There is more dark honey than light. Extracted, 8@9c.
BEESWAX.—24@25c.
Nov. 11. M. H. HUNT, Bell Branch, Mich.

CHICAGO.

HONEY.—Receipts of comb are averaging about as they usually do with a fair crop. Prices rule at 13@14c. for choice to fancy 1-lbs., which comprise the bulk of the receipts, very little in sections averaging 1½ to 2 lbs., and sells at 10@12c.; dark, 8@10c. Extracted, 6@8c.
BEESWAX.—25c.
Nov. 8. R. A. BURNETT, 161 South Water St.

KANSAS CITY.

HONEY.—Fancy white 1-lbs., 14c.; good, 13c.; dark 11c.; white 2-lbs., 13c. Extracted, white, 7c.; dark, 6c. Demand good.
Nov. 11. HAMBLIN & BEARSS, 514 Walnut St.

DENVER.

HONEY.—1-lb. comb, 13@15c. Extracted, 6@7c.
BEESWAX.—24@25c.
Dec. 9. J. M. CLARK COM. CO., 1421 15th St.

MILWAUKEE.

HONEY.—Choice white 1-lbs., 14@15c.; 2nd grade white 1-lbs., 13@14c.; old dark 1-lbs., 10c.; new, 10@11c. Extracted, white, in barrels and kegs, 7@8c.; in tins and pails, 8@9c.; dark, in barrels, 6@7c.; in kegs, 6@7c. Demand steady.
BEESWAX.—22@23c.
Nov. 11. A. V. BISHOP, 142 W. Water St.

NEW YORK.

HONEY.—Extracted, white clover, basswood, orange blossom and California, 8c.; buckwheat, 6 cts.; common Southern, 65@70c. per gallon. Demand is good. Comb honey, fancy white 1-lbs., 16c.; 2-lbs., 14c. Fair 1-lbs., 14c.; 2-lbs., 11@12c. Buckwheat, 1-lbs., 14@12c.; 2-lbs., 10@11c. Demand very good for fancy white 1-lbs. and buckwheat 1-lbs.
BEESWAX.—22c.
Oct. 2. F. G. STROHMEYER & CO., 122 Water St.

CHICAGO.

HONEY.—Demand for white clover 1-lbs. is improving, but price depends upon size and style of package, condition and appearance when received, ranging from 12@13c.; basswood, 11@11½c.; buckwheat, 8@10c. Extracted, 6½@7½c., depending upon style and size of package.
BEESWAX.—27@28c.
Nov. 9. S. T. FISH & CO., 150 S. Water St.

NEW YORK.

HONEY.—Market is inactive, and prices declining. Fancy white 1-lbs. 13@15c., 2-lbs. 12c. Off grade 1-lbs. 11@12c., 2-lbs. 10@11c. Buckwheat 1-lbs. 10@11c.; 2-lbs., 9c. Extracted in good demand. Basswood, 7½c.; California, 7½c.; orange bloom, 8@9c.; buckwheat 6 cts.; Southern, 7@7½c. per gallon.
HILDRETH BROS. & SEGELEN,
Dec. 9. 35 & 30 W. Broadway, near Duane St.

BOSTON.

HONEY.—It is selling a little slow. Fancy white clover 1-lbs., 16@17c.; fair to good, 15@16c.; 2-lbs., 15@16c.
BEESWAX.—24c.
Dec. 9. BLAKE & RIPLEY, 57 Chatham Street.

CINCINNATI.

HONEY.—A large amount of Comb on the market at 14@16c. for best white. Extracted at 5@8c.
BEESWAX.—Demand is good—24@25c. per lb. for good to choice yellow, on arrival.
Nov. 22. C. F. MUTH & SON, Freeman & Central Av.

KANSAS CITY.

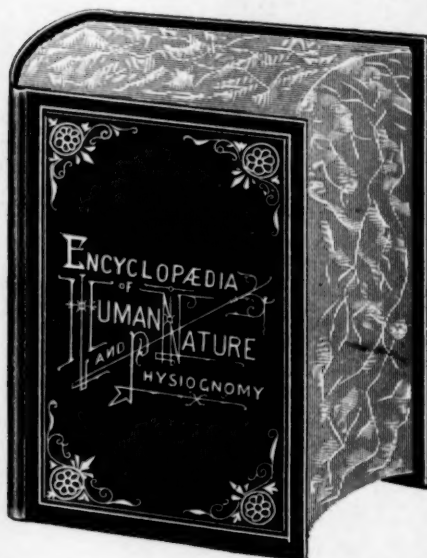
HONEY.—Selling slowly, especially extracted, on account of mild weather. White 1-lbs. 13@14c.; dark 10@12c.; white 2-lbs. 12@13c.; dark, 10@12c. Extracted, white, 7@8c.; dark, 5@6c.
BEESWAX.—22c.
Nov. 22. CLEMONS, CLOON & CO., cor 4th & Walnut.

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